The bracketing paradox in the Russian verbal complex: a view from suppletion

Nina Radkevich, University of York

INTRODUCTION. It has long been noted that the structure of verbal forms in Russian present a case of bracketing paradox, where there is a mismatch between morpho-syntactic and morphophonological representation (Pesetsky 1979, Matushansky 2002, a.o.). To be more precise, verbal prefixes, though internal syntactically and semantically, tend to be more peripheral than verbal suffixes with respect to a number of phonological processes (Matushansky 2002, Blumenfeld 2012), as schematically shown in (1). Based on evidence from suppletive verbal roots in Russian, I argue that the bracketing paradox, as in (1), arises at the pre-vocabulary insertion stage and the resulting structure can be accounted for by the application of the morphological process of rebracketing (Radkevich 2010, Bobaljik 2015).

RUSSIAN VERBAL MORPHOLOGY BACKGROUND. Like other Slavic languages, Russian has a rich verbal morphological inventory of prefixes and suffixes involved in creating aspectual triplets (imperfective vs. perfective vs. secondary imperfective). It is important to point out that unaffixed verbs in Russian are usually treated as imperfectives, prefixed verbs as perfectives, and verbs having both as secondary imperfectives, as in (2). Crucially, not all prefixes are uniform with respect to their syntactic and semantic behaviour: some prefixes (lexical prefixes; LP) are internal, i.e., located closer to the root, whereas others are more peripheral (superlexical prefixes) (Svenonius 2004, Gribanova 2009, a.o.). The two types of prefixes come with two sets of properties (for an overview see Tatevosov 2008, Gribanova 2010, to appear, a.o.). Following the principles of Distributed Morphology (Halle and Marantz 1993, Harley and Noyer 2000, Bobaljik 2015, a.o.), I assume that each morpheme of the verb corresponds to a functional head. Furthermore, I follow the proposal in Gribanova 2010, 2013, to appear and assume that the syntactic structure involved in the creation of the verbal complex is the one in (3), where the correct morpheme order is derived via head movement. Note that in this structure, AspP is responsible for secondary imperfective, realized as verbal suffixes, whereas all non-LP prefixes are merged between LP and AspP.

VERBAL SUPPLEMENTATION. Similar to many world languages, Russian has several instances of verbal suppletion sensitive to aspectual specification, as illustrated in (4). An interesting case is exemplified by the first suppletive pair klast’-položit’ ‘to put’: the root klad cannot form participate in forming perfective forms with prefixes, then the root lož is used, as in (5), but the root klad is found in secondary imperfectives, which contain both a prefix (responsible for perfective) and a secondary imperfective suffix –yv-, as in (6). The form in (6) presents an interesting challenge for the structure in (3) given the assumption of DM that vocabulary insertion starts with the root node and proceeds up the derivation. To be more explicit, any syntactic derivation operates only with morpho-syntactic features, which are then replaced with actual vocabulary items at PF. The output of the syntactic derivation for (6) is given in (7). The relevant vocabulary insertion rules are in (8). The process of vocabulary insertion starts with the root PUT which should be replaced with the vocabulary item lož given that the closest node contains the feature [PERF]. Thus, the resulting verbal form should be otlazyvat’, which is unattested in Standard Russian.

The problem discussed above can be resolved by assuming that there is a morphological operation of rebracketing, which applies prior to the Vocabulary Insertion. The operation of rebracketing under adjacency involves altering of constituency relations between terminal nodes, without changing their ordering (Radkevich 2010, Bobaljik 2015), as schematically shown in (9). The application of rebracketing to (7) would result in a structure where the root
node is a sister of the Asp node, as in (10). The vocabulary insertion, (8), applied to the structure in (10) yields the correct verbal form: first \( \sqrt{\text{PUT}} \) is replaced with /klad/ due to the root node being a sister to the node with the [IMPERF] feature, which is then replaced with /yv/. Finally, the vocabulary item /ot/ is inserted.

**CONCLUSION.** In this paper, I suggest that the morphological structure of Russian verbs should be identical to the one relevant for phonological processes. I also propose that this structure is a result of the post-syntactic and pre-vocabulary insertion operation of rebracketing.

**DATA**

1. \([\text{prefix root} \ 	ext{suffix}]\) Syntax-Semantics
   \([\text{prefix root} \ 	ext{suffix}]\) Phonology

2. a. pis-a-t’
   b. pod-pis-a-t’
   c. pod-pis-yv-a-t’
   - write-TH-INF
   - under-write-TH-INF
   - under-write-S.IMPFTH-INF
   - ‘to write (imperfective)’
   - ‘to write (perfective)’
   - ‘to write (secondary imperfective)’

3. \(\begin{array}{c}
   \text{TP} \\
   \text{T} \quad \text{AspP} \\
   \text{Asp} \quad \text{vP} \\
   \text{v} \quad \sqrt{\text{P}} \\
   \text{TP} \\
   \text{T} \quad \text{AspP} \\
   \text{Asp} \quad \ldots
\end{array}\)

4. klast’ – połožit’ ‘to put’
   brat’ – vzjat’ ‘to take’
   sadit’sja – sest’ ‘to sit down’
   govorit’ – skazat’ ‘to say’
   lovit’ – pojmát’ ‘to catch’

5. *ot-klas-t’ – ot-lož-it’
   ‘to put aside (perfective)’

6. ot-klad-yv-at’
   ‘to put aside (imperfective)’

7. \(\begin{array}{c}
   \text{Asp} \\
   \sqrt{\text{PUT}}
\end{array}\)

8. \(\begin{array}{c}
   /\text{lož}/ \Leftrightarrow \sqrt{\text{PUT}}/ \text{[PERF]} \\
   /\text{klad}/ \Leftrightarrow \sqrt{\text{PUT}}/ \text{[IMPERF]} \\
   /\text{ot}/ \Leftrightarrow \sqrt{\text{PUT}}/ \text{[IMPERF]} \\
   /\text{yv}/ \Leftrightarrow \sqrt{\text{PUT}}/ \text{[IMPERF]}
\end{array}\)

9. \([A \ B \ C] \Leftrightarrow [A [B \ C]]\)

10. \(\begin{array}{c}
   \text{Asp} \\
   \sqrt{\text{PUT}}
\end{array}\)